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Macromolecular properties and hypolipidemic effects of four sulfated polysaccharides from sea cucumbers

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Highlights

- Two sulfated fucoidans and two fucosylated chondroitin were isolated from sea cucumbers;
- FCS-*Pg*, fCS-*Ib*, and fuc-*Pg* are random linear chaines, while fuc-*Ib* was spherical.
- Chain conformation of these polysaccharides were affected by sulfation pattern;
- Polysaccharides with linear chain show stronger antihyperlipidemic activity than random coil;
- Our results provides new sight for SAR study of sulfated polysaccharides

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